Staff Memorandum

Prepared by the

Industry, Technology, and Employment Program

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Can a Waste-end Tax Help Eliminate the Growth of Superfund Expenditures?

This OTA Staff Memorandum has
neither been reviewed nor approved
by the Technology Assessment Board.

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First, let me note that the statement in your letter that EPA has decided "to detoxify or destroy waste instead of moving it to new burial sites" is not quite true as yet. Although EPA has issued a policy statement along these lines, our examination of current reports and decisions on cleanups indicates no substantial change in practice. Moreover, EPA has formulated exceptions to the general policy. Cleanup wastes are likely to continue to be sent to commercial landfills or left where they are at Superfund sites. We will next respond to the four questions that you asked.

1) Are currently operating land disposal facilities a significant source of future Superfund sites?

   EPA now acknowledges that perhaps 50 percent of operating land disposal facilities will or should be closed down in a few months because of noncompliance, as required by the 1984 RCRA amendments. However, many may not be closed by EPA because, for example, they will be granted time to come into compliance. In the longer term, virtually all operating land disposal facilities are likely to leak hazardous substances into the environment. The recent study by the House Energy and Commerce Committee found that 75 percent of operating facilities are in an unacceptable condition with regard to the groundwater monitoring requirements of RCRA. Whether facilities become Superfund sites depends on the policies of EPA. It now appears that EPA will attempt to use enforcement actions under RCRA rather than listing such sites on Superfund's National Priorities List. However, nearly ten years of experience under the RCRA program indicates that the former strategy is not likely to be effective. For example, there are already indications that companies can avoid their responsibility under RCRA in various ways, such as through bankruptcy. More timely emergency responses and remedial cleanups are possible under Superfund.

2) Will a waste-end tax help to minimize reliance on these disposal facilities?

   To the extent that a waste-end tax is high enough to provide an economic disincentive to generate hazardous waste or to provide an incentive to use an alternative to land disposal for waste management, then it will minimize use of land disposal facilities. However, for most of the over 20 states that have instituted a waste-end tax and for most of the proposals at the Federal level, the rates of taxation on the land disposal of hazardous waste are too low to offer such economic incentives. The problem is that the actual cost or price differential between land disposal and higher cost waste treatment alternatives is so large that a relatively small tax on land disposal is insufficient to affect waste management decisions. It appears that tax rates of well over $20 per ton, perhaps in the $40 to $50 per ton range, may be necessary to shift substantial numbers of waste generators away from land disposal. Typically, waste treatment options will cost several hundred dollars more per ton than land disposal, although this difference may become less for some facilities as new requirements for land disposal take effect.

3) Can a waste-end tax thereby help to reduce the long-term costs of cleaning up abandoned hazardous waste sites?

To the extent that there are significant shifts away from the use of land disposal through a high enough waste-end tax, future cleanup costs would decrease. EPA's data on NPL sites shows that land disposal sites are the chief source of Superfund sites. Although land disposal sites may have already received wastes, reducing the total amount of hazardous waste in a site is important in reducing the ultimate cleanup costs, as less material will have to be managed in the cleanup.

4) Can the waste-end tax provide a significant disincentive to land disposal above and beyond the projected impact of the 1984 amendments to the Resource Conservation and Recovery Act?

The future impact of the 1984 amendments are far more uncertain than most people now believe. What have been widely interpreted to be bans on future land disposal of hazardous waste are not likely to be implemented for a long time, even beyond the statutory deadlines, and they may not apply to most hazardous waste nor to all forms of land disposal. Influencing the decisions of those who generate hazardous waste through a direct economic measure is likely to be more effective than relying on a regulatory approach alone. To date, there has been substantial level of non-compliance with RCRA regulations, many of which are flawed technically. Nor has EPA generally met the deadlines imposed by Congress.

Waste-end tax issues are discussed further on pages 22 to 23 and 45 to 48 of Superfund Strategy. Sources of Superfund sites are discussed in detail in Chapter 5 of the Report; that material is summarized on pages 11 to 13 in Chapter 1 and policy related issues treated on pages 48-49 in Chapter 2.